

## Advanced Modeling

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Process steps:

- Data ingestion and preparation
- Model building and training
- Model deployment



Steps are organized into pipelines

**DevOps** = process automation applied to classical software development

**MLOps** = applying DevOps principles to Machine Learning pipelines

## Machine Learning Pipelines

As the process of building your models becomes more complex, it becomes more important to get a handle on the steps to prepare your data and train your models in an organized way. In these scenarios, there can be many steps involved in the end-to-end process, including:

- Data ingestion
- Data preparation
- Model building & training
- Model deployment.

These steps are organized into *machine learning pipelines*.



## MLOps: Creating Automatic End-to-End Integrated Processes

As we said earlier, we don't want all the steps in the machine learning pipeline to be manual—rather, we want to develop processes that use automated builds and deployments. The general term for this approach is *DevOps*; when applied to machine learning, we refer to the automation of machine learning pipelines as **MLOps**.

